What is claimed is

1. A method for encoding a syntax element contained in a precoded video signal into a coded bit stream, the precoded video signal representing at least one video frame, the syntax element being associated with a predetermined portion of the video frame and being indicative of as to whether the predetermined portion of the video frame is precoded in a first or a second way into the precoded video signal, the method comprising the following steps:

investigating as to whether a neighboring portion of the video frame neighboring the predetermined portion is precoded in the first way or the second way, in order to obtain a binary value;

assigning one of at least two context models to the predetermined portion of the video frame based on the binary value, wherein each context model is associated with a different probability estimation; and

arithmetically encoding the syntax element into the coded bit stream based on the probability estimation with which the assigned context model is associated.

2. The method of claim 1, wherein the video frame is spatially subdivided into an array of macroblock pairs, each macroblock pair consisting of two macroblocks, and the predetermined portion is a predetermined macroblock in a predetermined macroblock pair and the neighbouring portion is a neighbouring macroblock in a neighbouring mac-

roblock pair adjacent to the predetermined macroblock pair.

3. The method of claim 1, wherein the syntax element is contained several times in the precoded video signal, each time being associated with a different portion of the video frame, and wherein the method is conducted each time.

4. The method of claim 1, wherein the step of investigating comprises the step of investigating a syntax element associated with the neighbouring portion.

5. The method of claim 2, wherein the video frame is composed of picture samples, the picture samples belonging either to a first or a second field being captured at different time instants, and wherein the syntax element is a frame/field decoding flag indicating as to whether the predetermined macroblock merely contains either picture samples belonging to the first field or picture samples belonging to the second field or the predetermined macroblocks contains both, picture samples belonging to the first field and picture samples belonging to the second field, and wherein the step of investigating comprises investigating as to whether said neighbouring macroblock merely contains either picture samples belonging to the first field or picture samples belonging to the second field, or the neighbouring macroblock contains both, picture samples belonging to the first field and picture samples belonging to the second field.

6. The method of claim 2, wherein each macroblock is assigned to a macroblock address, and the step of investigating comprises the following steps:

a) computing a neighbouring macroblock address based on a macroblock address of the predetermined macroblock in order to obtain a computed neighbouring macroblock address for the neighbouring macroblock;

b) checking, as to whether the computed neighbouring macroblock address is assigned one of the macroblocks in the video frame, in order to obtain a check result;

c) if the check result is positive, investigating as to whether the macroblock assigned to the computed neighbouring macroblock address is precoded in the first way or the second way;

d) if the check result is positive and the macroblock assigned to the computed neighbouring macroblock address is precoded in a predetermined one of the first and the second way, setting the binary value to a first bit value; and

e) if the check result is negative or the macroblock assigned to the computed neighbouring macroblock address is not precoded in the predetermined one of the first and the second way, setting the binary value to a second bit value being different to the first bit value.

7. The method of claim 6, wherein the macroblocks are grouped into slices and step b) is adapted such that the check result is merely positive if the macroblock assigned to the computed neighbouring macroblock address belongs to the same slice as the predetermined macroblock.

8. The method of claim 6, wherein steps a) to e) are performed another time using a different dependency on the macroblock address of the predetermined macroblock in step a), thereby obtaining a further binary value, and wherein the step of assigning is adapted to perform association based on both binary values.

9. The method of claim 8, wherein the step of assigning comprises adding the first and the second value to obtain a context model index corresponding to the context model.

10. The method of claim 1, wherein the step of arithmetically encoding comprises the following steps:

deducing a current arithmetic code interval in accordance with the probability estimation with which the assigned context model is associated to one of two subintervals into which the probability estimation with which the assigned context model is associated separates the current arithmetic code interval, in order to obtain a reduced current arithmetic coding interval, wherein the coded bit stream depends on the reduced current arithmetic coding interval.

11. The method of claim 1, further comprising:

adapting the probability estimation with which the assigned context model is associated based on the syntax element.

12. A method for decoding a syntax element from a coded bit stream, the syntax element being contained in a precoded video signal, the precoded video signal representing at least one video frame, the syntax element being associ-

ated with a predetermined portion of the video frame and being indicative of as to whether the predetermined portion of the video frame is precoded in a first or a second way into the precoded video signal, the method comprising the following steps:

investigating as to whether a neighboring portion of the video frame neighboring the predetermined portion is precoded in the first way or the second way, in order to obtain a binary value;

assigning one of at least two context models to the predetermined portion of the video frame based on the binary value, wherein each context model is associated with a different probability estimation; and

arithmetically decoding the syntax element from the precoded bit stream based on the probability estimation with which the assigned context model is associated.

13. The method of claim 12, wherein the video frame is spatially subdivided into an array of macroblock pairs, each macroblock pair consisting of two macroblocks, and the predetermined portion is a predetermined macroblock in a predetermined macroblock pair and the neighbouring portion is a neighbouring macroblock in a neighbouring macroblock pair adjacent to the predetermined macroblock pair.

14. The method of claim 12, wherein the syntax element is contained several times in the precoded video signal, each time being associated with a different portion of the video frame, and wherein the method is conducted each time.

15. The method of claim 12, wherein the step of investigating comprises the step of investigating a syntax element associated with the neighbouring portion.

16. The method of claim 13, wherein the video frame is composed of picture samples, the picture samples belonging either to a first or a second field being captured at different time instants, and wherein the syntax element is a frame/field decoding flag indicating as to whether the predetermined macroblock merely contains either picture samples belonging to the first field or picture samples belonging to the second field or the predetermined macroblocks contains both, picture samples belonging to the first field and picture samples belonging to the second field, and wherein the step of investigating comprises investigating as to whether said neighbouring macroblock merely contains either picture samples belonging to the first field or picture samples belonging to the second field, or the neighbouring macroblock contains both, picture samples belonging to the first field and picture samples belonging to the second field.

17. The method of claim 12, wherein each macroblock is assigned to a macroblock address, and the step of investigating comprises the following steps:

a) computing a neighbouring macroblock address based on a macroblock address of the predetermined macroblock in order to obtain a computed neighbouring macroblock address for the neighbouring macroblock;

b) checking, as to whether the computed neighbouring macroblock address is assigned one of the macroblocks in the video frame, in order to obtain a check result;

c) if the check result is positive, investigating as to whether the macroblock assigned to the computed neighbouring macroblock address is precoded in the first way or the second way;

d) if the check result is positive and the macroblock assigned to the computed neighbouring macroblock address is precoded in a predetermined one of the first and the second way, setting the binary value to a first bit value; and

e) if the check result is negative or the macroblock assigned to the computed neighbouring macroblock address is not precoded in the predetermined one of the first and the second way, setting the binary value to a second bit value being different to the first bit value.

18. The method of claim 17, wherein the macroblocks are grouped into slices and step b) is adapted such that the check result is merely positive if the macroblock assigned to the computed neighbouring macroblock address belongs to the same slice as the predetermined macroblock.

19. The method of claim 17, wherein steps a) to e) are performed another time using a different dependency on the macroblock address of the predetermined macroblock in step a), thereby obtaining a further binary value, and wherein the step of assigning is adapted to perform association based on both binary values.

20. The method of claim 19, wherein the step of assigning comprises adding the first and the second value to obtain the context model corresponding to the context model.

21. The method of claim 12, wherein the step of arithmetically decoding comprises the following steps:

checking as to whether an arithmetic codeword value indicated by the coded bit stream falls into a first or a second of two subintervals, into which the probability estimation with which the assigned context model is associated separates a current arithmetic code interval, wherein a value of the syntax element depends on the subinterval in which the arithmetic codeword value falls.

22. The method of claim 12, further comprising:

adapting the probability estimation with which the assigned context model is associated based on the syntax element.

23. A computer program having instructions for performing, when running on a computer, a method for encoding a syntax element contained in a precoded video signal into a coded bit stream, the precoded video signal representing at least one video frame, the syntax element being associated with a predetermined portion of the video frame and being indicative of as to whether the predetermined portion of the video frame is precoded in a first or a second way into the precoded video signal, the method comprising the following steps:

investigating as to whether a neighboring portion of the video frame neighboring the predetermined portion is precoded in the first way or the second way, in order to obtain a binary value;

assigning one of at least two context models to the predetermined portion of the video frame based on the binary value, wherein each context model is associated with a different probability estimation; and

arithmetically encoding the syntax element into the coded bit stream based on the probability estimation with which the assigned context model is associated.

24. A computer program having instructions for performing, when running on a computer, a method for decoding a syntax element from a coded bit stream, the syntax element being contained in a precoded video signal, the precoded video signal representing at least one video frame, the syntax element being associated with a predetermined portion of the video frame and being indicative of as to whether the predetermined portion of the video frame is precoded in a first or a second way into the precoded video signal, the method comprising the following steps:

investigating as to whether a neighboring portion of the video frame neighboring the predetermined portion is precoded in the first way or the second way, in order to obtain a binary value;

assigning one of at least two context models to the predetermined portion of the video frame based on the binary value, wherein each context model is associated with a different probability estimation; and arithmetically decoding the syntax element from the precoded bit stream based on the probability estimation with which the assigned context model is associated.

25. An apparatus for encoding a syntax element contained in a precoded video signal into a coded bit stream, the precoded video signal representing at least one video frame, the syntax element being associated with a predetermined portion of the video frame and being indicative of as to whether the predetermined portion of the video frame is precoded in a first or a second way into the precoded video signal, the apparatus comprising

means for investigating as to whether a neighboring portion of the video frame neighboring the predetermined portion is precoded in the first way or the second way, in order to obtain a binary value;

means for assigning one of at least two context models to the predetermined portion of the video frame based on the binary value, wherein each context model is associated with a different probability estimation; and

means for arithmetically encoding the syntax element into the coded bit stream based on the probability estimation with which the assigned context model is associated.

26. An apparatus for decoding a syntax element from a coded bit stream, the syntax element being contained in a precoded video signal, the precoded video signal representing at least one video frame, the syntax element being associated with a predetermined portion of the video frame and being indicative of as to whether the predeter-

mined portion of the video frame is precoded in a first or a second way into the precoded video signal, the apparatus comprising

means for investigating as to whether a neighboring portion of the video frame neighboring the predetermined portion is precoded in the first way or the second way, in order to obtain a binary value;

means for assigning one of at least two context models to the predetermined portion of the video frame based on the binary value, wherein each context model is associated with a different probability estimation; and

means for arithmetically decoding the syntax element from the precoded bit stream based on the probability estimation with which the assigned context model is associated.